

## ROLLING BEARING

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Applicant: NSK LTD

Classification:

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- European:

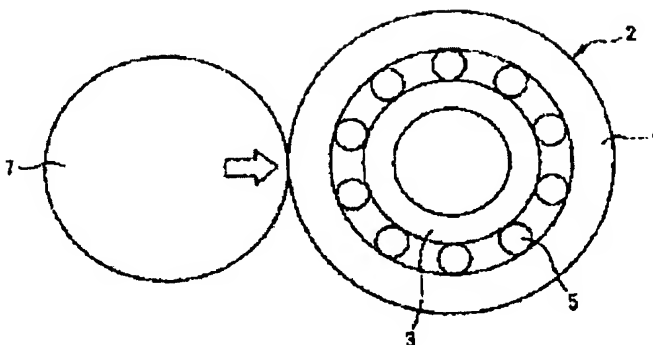
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### Abstract of JP2002194438

**PROBLEM TO BE SOLVED:** To improve wear resistance of a contacting surface with the other member while keeping good rolling fatigue service life, with respect to a rolling bearing rotating while a rotating ring comes in contact with the other member. **SOLUTION:** An outer ring (rotating ring) 4 in an outer ring rolling bearing (double-row cylindrical roller bearing) 2 is formed as the following method. A base stock composed of a steel material containing  $\leq 1.1\%$  C, 0.01-1.0% Si, 0.10-0.9% Mn as alloy components, is worked into a prescribed shape. After applying a heat treatment containing a carburizing or a carbonitriding treatment to the material to be worked, the carbon content of the surface layer part on the contacting surface with the other member is set to 1.2%-1.7% and the carbon content of the surface layer part on the raceway surface is set to 0.7%-1.1% by removing the surface layer part on a raceway surface. This outer ring 4 is rotated while coming in contact with a load roller (the other member) 7.



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